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DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
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FACT SHEET

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT TO DISCHARGE TREATED WASTEWATER INTO WATERS OF THE COMMONWEALTH

KPDES No.: KY0096776 Permit Writer: Mahmoud Sartipi Date: September 22, 2009

AI No.: 2738

1. SYNOPSIS OF APPLICATION

a. Name and Address of Applicant

National Maintenance & Repair of Kentucky, Inc. P.O. Box 534
South Point, Ohio 45680

b. Facility Location

National Maintenance & Repair of Kentucky, Inc. 1175 Clarks Ferry Road Ledbetter, Livingston County, Kentucky 42058

c. Description of Applicant's Operation

Shipbuilding and Repair

d. Production Capacity of Facility

Not applicable

e. Description of Existing Pollution Abatement Facilities

Outfall 001: Wash waters from dry cargo barge cleaning are treated by settlement prior to discharge. Outfall 002 has been eliminated.

f. Permitting Action

This is a reissuance of a minor individual KPDES permit to an existing shipbuilding and repair facility (SIC 3731).



AI No.: 2738
Fact Sheet Page 2

2. **RECEIVING WATER**

a. Name/Mile Point

Outfall 001 discharges to Ohio River at Latitude of 37° 03' 19'' and Longitude of 88° 31' 03"

b. Stream Segment Use Classification

Pursuant to 401 KAR 10:026, Section 5, Ohio River carries the following classifications: Warmwater Aquatic Habitat, Primary/Secondary Contact Recreation, and Domestic Water Supply.

c. Stream Segment Categorization

Pursuant to 401 KAR 10:030, Section 1, the Ohio River from river mile 910.0 to 981.0 is categorized as Impaired Waters on the 2008 303(d) List of Waters for Kentucky. The impaired uses are Fish Consumption (Partial support). The pollutants of concern are Dioxin (Including 2,3,7,8-TCDD) and PCBs. The suspected sources are unknown. Review of the renewal application for this permit does not indicate a presence of these pollutants. Thus, the permit reissuance does not contribute to the existing impairment.

d. Stream Low Flow Condition

The 7-day, 10-year low flow and harmonic mean conditions of Ohio River are 51,000 and 175,000 cfs, respectively.

AI No.: 2738
Fact Sheet Page 3

3. REPORTED DISCHARGE AND PROPOSED LIMITS

Description of Discharge - Outfall 001 - Wash water from dry cargo barge cleaning and repair

Effluent Characteristics	Reported Di Monthly Average	scharge Daily Maximum	Proposed Limits Monthly Daily Average Maximum	Applicable Water Quality Criteria and/or Effluent Guidelines
Flow (MGD)	0.1409	0.19	Report Report	401 KAR 5:065, Section 2(8)
Oil & Grease (mg/l)	5.44	8	10 15	401 KAR 5:080, Section 1(2)(c)2
Total Suspended Solids (mg/l)	18.2	40	30 60	401 KAR 5:080, Section 1(2)(c)2
$BOD_5 (mg/1)$	83.8	150	Report Report	401 KAR 5:065, Section 2(8)
Total Recoverable Iron (mg/l)	0.98	2.1	Report 4.0	401 KAR 5:065, Section 2(12)
		~ ~ ~		401 KAR 10:031, Section 6
Phosphorus (mg/l)	318	2000	Report Report	401 KAR 5:065, Section 2(12)
				401 KAR 5:065, Section 2(8)
Ammonia, (as mg/l N)	736.7	2700	Report 19.89	401 KAR 10:031, Sections 4(1)
Fluoride (mg/l)	11.849	50	Report Report	401 KAR 5:065, Section 2(8)
Chlorides (mg/l)	3838	7100	Report Report	401 KAR 5:065, Section 2(8)
Chlordane (µg/l)	0.0011	0.0012	Report Report	401 KAR 5:065, Section 2(8)
Hardness (as $mg/l CaCO_3$) 1/	NR	NR	Report Report	401 KAR 5:065, Section 2(8)
Total Recoverable Copper (mg/l)	0.0075	0.10	Report Report	401 KAR 5:065, Section 2(8)
Total Recoverable Lead (mg/l)	0.0075	0.01	Report Report	401 KAR 5:065, Section 2(8)
Total Recoverable Aluminum (mg/l)	0.812	1.1	Removing from permit	401 KAR 5:080, Section 1(2)(c)2
Total Organic Carbon (mg/l)	151	680	Removing from permit	401 KAR 5:080, Section 1(2)(c)2
pH (standard units)	8.45	9.34	6.0 (min) 9.0 (ma	

The data in the Reported Discharge columns for BOD_5 , Chloride, Chlordane, Copper, and Lead were determined from the submitted permit application.

NR means Not Reported on the DMRs

1/ Measure the Hardness of the receiving stream.

KPDES No.: KY0096776 AI No.: 2738

Fact Sheet Page 4

4. METHODOLOGY USED IN DETERMINING LIMITATIONS

a. Serial Number

Outfall 001 - Wash water from dry cargo barge cleaning and repair

b. Effluent Characteristics

Total Recoverable Lead Total Recoverable Copper pH
Total Suspended Solids Biochemical Oxygen Demand Oil & Grease
Total Recoverable Iron Phosphorus Flow
Ammonia Fluoride Hardness
Chlordane Chlorides

c. Pertinent Factors

None

d. Monitoring Requirements

Instantaneous flow measurements shall be collected once per month.

Total Suspended Solids, Oil & Grease, Total Recoverable Iron, Total Recoverable Lead, Total Recoverable Copper, Chlorides, BOD_5 , Ammonia, Fluoride, Phosphorus, Hardness and pH shall be monitored once per month by grab sample.

e. Justification of Conditions

The Kentucky regulations cited below have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes.

Flow, BOD_5 , Hardness, Fluoride, Chlorides, Chlordane, Phosphorus, Total Recoverable Copper and Total Recoverable Lead The monitoring requirements for these parameters are consistent with the requirements of 401 KAR 5:065, Section 2(8).

Oil & Grease and Total Suspended Solids

The limits and requirements for these parameters are consistent with the requirements of 401 KAR 5:080, Section 1(2)(c)2. These limits are representative of the Division of Water's "Best Professional Judgment" (BPJ) determination of the "Best Practicable Control Technology Currently Available" (BPT) and "Best Available Technology Economically Achievable" (BAT) requirements for these types of discharges.

pH, Total Recoverable Iron and Ammonia

The limits and requirements for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4(1)(b), 401 KAR 10:031, Section 6 and 401 KAR 10:031, Section 4(1).

Total Organic Carbon and Total Recoverable Aluminum

The removal of these parameters from the permit is consistent with 401 KAR 5:080, Section 1(2)(c)2. A review of the DMR data for the previous permit indicated that reasonable potential did not exist for these parameters to be limited or monitored in the permit. Therefore, it is the "Best Professional Judgment" (BPJ) of the Division of Water that these parameters be removed from the permit.

5. **ANTIDEGRADATION**

The conditions of 401 KAR 10:029, Section 1 have been satisfied by this permit action. Since this permit action involves reissuance of an existing permit, and does not propose an expanded discharge, a review under 401 KAR 10:030 Section 1 is not applicable.

KPDES No.: KY0096776 AI No.: 2738 Fact Sheet Page 5

6. PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS

The permittee will comply with all effluent limitations by the effective date of the permit.

7. PROPOSED SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE

Best Management Practices (BMP) Plan

Pursuant to 401 KAR 5:065, Section 2(10), a BMP requirement shall be included: to control or abate the discharge of pollutants from ancillary areas containing toxic or hazardous substances or those substances which could result in an environmental emergency; where numeric effluent limitations are infeasible; or to carry out the purposes and intent of KRS 224. The facility has several areas where support activities occur which have a potential of the discharge of such substances through storm water runoff or spillage. Some of these areas will drain to present wastewater treatment plants, others will not.

Outfall Signage

As a member of ORSANCO (Ohio River Valley Sanitation Commission) the Commonwealth of Kentucky through the Division of Water implements a requirement that the permittee post a permanent marker at each discharge point to the Ohio River. It is the Best Professional Judgment of the Division of Water, 401 KAR 5:080, Section 1(2) (c) 2, that all permittees post a marker at all discharge locations and/or monitoring points. The ORSANCO requirements for the marker specify it to be at least 2 feet by 2 feet in size and a minimum of 3 feet above ground level with the Permittee Name and KPDES permit and outfall numbers in 2 inch letters. For internal monitoring points the marker shall be of sufficient size to include the outfall number in 2 inch letters and is to be posted as near as possible to the actual sampling location.

8. **PERMIT DURATION**

Five (5) years. This facility is in the Four Rivers, Upper & Lower Cumberland Basin Management Unit as per the Kentucky Watershed Management Framework.

9. **PERMIT INFORMATION**

The application, draft permit, fact sheet, public notice, comments received and additional information is available from the Division of Water at 200 Fair Oaks Lane, Frankfort, Kentucky 40601.

10. REFERENCES AND CITED DOCUMENTS

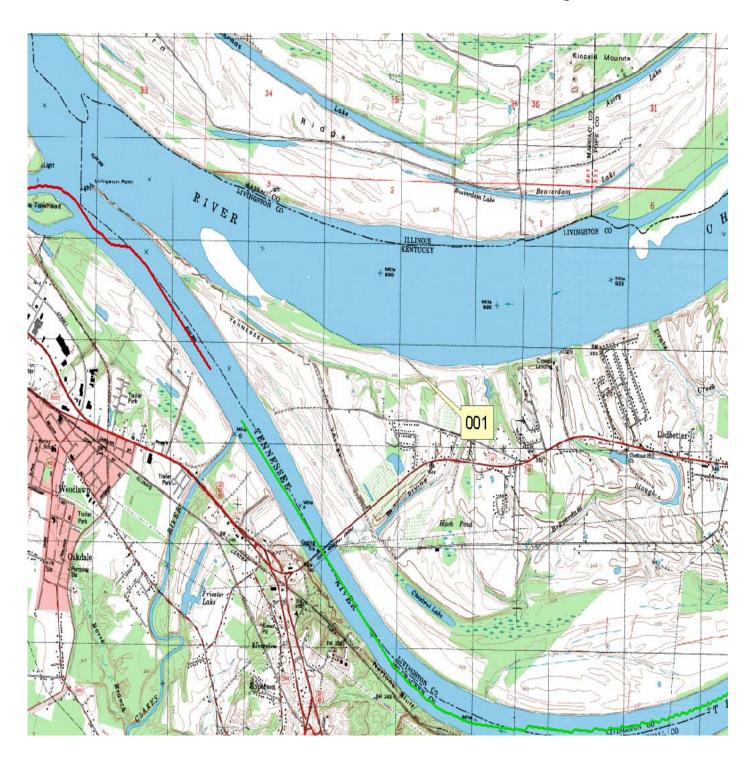
All material and documents referenced or cited in this fact sheet are parts of the permit information as described above and are readily available at the Division of Water Central Office. Information regarding these materials may be obtained from the person listed below.

11. CONTACT

For further information on the draft permit or comment process, contact the individual identified on the Public Notice or the Permit Writer - Mahmoud Sartipi at (502) 564-8158, extension 4954, or email Mahmoud.sartipi@ky.gov.

12. PUBLIC NOTICE INFORMATION

Please refer to the attached Public Notice for details regarding the procedures for a final decision, deadline for comments and other information required by 401 KAR 5:075, Section 4(2)(e).



Permit No.: KY0096776 AI No.: 2738 Fact Sheet Attachment A Page A - 1

STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) - REASONABLE POTENTIAL ANALYSIS - OUTFALL 001

Permit Writer Date Entered	Mahmoud Sartipi 5/29/2009 National	
Facility Name	Maintenance & Repair of Kentucky, Inc.	
KPDES Number	KY0096776	
Outfall Number	001	
Case	Reissuance	
Status:		
Is this an existing facility – Enter "E"		
Is this an existing facility with an increase in pollutant load – Enter "I"		
Is this a new facility – Enter "N" Is this a regional facility with an approved up-to-date 201 plan – Enter "R"		
Has the permittee made a successful alternatives analysis/socioeconomic demonstration – Enter "A"	Е	
Receiving Water Name	∟ Ohio River	
Discharge Mile Point	51.5	
-	Paducah Water	
Public Water Supply Name	Works	
Intake Water Name	Paducah Water	
	Works	
Intake Mile Point	45.8	
Total Effluent Flow (Q _T)	0.1409	MGD
Receiving Water 7Q10 (Q _{RW7Q10})	51000	cfs
Receiving Water Harmonic Mean (Q _{RWHM})	175000	cfs
Receiving Water pH	7.5	SU
Receiving Water Temperature	20.00	°C
Intake Water 7Q10 (Q _{IW7Q10})	51000	cfs
Intake Water Harmonic Mean (Q _{IWHM})	175000	cfs
Effluent Hardness	100	(as mg/l CaCO3)
Receiving Water Hardness	100	(as mg/l CaCO3)
Zone of Initial Dilution (ZID)	1	
Mixing Zone (MZ)	0	
Acute to Chronic Ratio (ACR)	0.1	
Impaired	Yes	
Permittee agrees to accept no mixing zone for bioaccumulative or persistent pollutants prior to 09/08/2014	Yes	

Permit No.: KY0096776

AI No.: 2738

Fact Sheet Attachment A

Page A - 2

STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) - REASONABLE POTENTIAL ANALYSIS - OUTFALL 001

Calculation Methodology

Definitions

Acute to Chronic Ratio	ACR	Total Effluent Flow	Q_T
Aquatic Life Acute Criteria	C_A	Receiving Water 7Q10	Q_{RW7Q10}
Aquatic Life Chronic Criteria	C_C	Receiving Water Harmonic Mean	Q_{RWHM}
Human Health Criteria - Fish Only	C_{HHFO}	Intake Water 7Q10	Q_{IW7Q10}
Human Health Criteria - Fish & Water	C_{HHFW}	Intake Water Harmonic Mean	Q_{IWHM}
End of Pipe Effluent Limit	C_T	Zone of Initial Dilution	ZID
Instream Background Concentration	C_{U}	Mixing Zone	MZ
Toxicity Units - Acute	TU_a	Toxicity Units - Chronic	TU_c
Effluent Hardness	H_T	Receiving Water Hardness	H_RW

Aquatic Life - Chemical Specific

Acute Chronic Mixing Zone / Complete Mix

NO ZID given $C_T = C_A$ $C_T = \{C_C[Q_T + (MZ)(Q_{RW7Q10})] - [C_U(MZ)(Q_{RW7Q10})]\}/Q_T$

ZID given $C_T = (C_A - C_U) \times (ZID)$

Human Health - Chemical Specific

Fish Only: Mixing Zone / Complete Mix

 $\overline{C_{\text{T}}} = \{C_{\text{HHFO}}[Q_{\text{T}} + (MZ)(Q_{\text{RWHM}})] - C_{\text{U}}(MZ)(Q_{\text{RWHM}})\}/Q_{\text{T}}$

Fish & Water Only: Mixing Zone / Applicable at point of withdrawal

 $\begin{array}{ll} \text{Carcinogen} & \text{$C_T = \{C_{\text{HHFW}}[Q_T + (Q_{\text{IWHM}})] - C_U(Q_{\text{IWHM}})\}/Q_T$} \\ \text{Non-Carcinogen} & \text{$C_T = \{C_{\text{HHFW}}[Q_T + (Q_{\text{IW7Q10}})] - C_U(Q_{\text{IW7Q10}})\}/Q_T$} \\ \end{array}$

Aquatic Life - Whole Effluent Toxicity

Acute (Units TU_a) Chronic Mixing Zone / Complete Mix (Units TUc)

NO ZID given CT = CA $C_T = \{C_C[Q_T + (MZ)(Q_{RW7Q10})] - [C_U(MZ)(Q_{RW7Q10})]\}/Q_T$ ZID given $C_T = (C_A - C_U) \times (ZID)$ Conversion of TU_C to TU_a : $TU_C \times ACR = TU_A$

Permit No.: KY0096776 AI No.: 2738 Fact Sheet Attachment A Page A - 3

STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) - REASONABLE POTENTIAL ANALYSIS - OUTFALL 001

Metal Aquatic Criteria

<u>Pollutant</u>	Acute Criteria	Chronic Criteria
Total Recoverable Cadmium	e ^{(1.0166} (In Hardness) - 3.924)	e ^{(0.7409 (In Hardness) - 4.719)}
Chromium III	e ^{(0.8190} (In Hardness) + 3.7256) (0.9422 (In Hardness) - 1.700)	e ^{(0.8190} (In Hardness) + 0.6848) (0.8545 (In Hardness) - 1.702)
Total Recoverable Copper	e ^{(0.3422} (In Hardness) - 1.460)	e ^{(1.273} (In Hardness) - 4.705)
Total Recoverable Lead Total Recoverable Nickel	(0.8460 (In Hardness) + 2.255)	e(0.8460(In Hardness) + 0.0584)
Total Recoverable Silver	e(1.72 (In Hardness) - 6.59)	e
Total Recoverable Zinc	e ^{(0.8473 (In Hardness) + 0.884)}	e ^{(0.8473 (In Hardness) + 0.884)}

Hardness (as mg/l CaCO₃)

Zone Initial Dilution (ZID) $H_{RW} + [H_T + H_{RW}]/ZID$ Mixing Zone $[(Q_{RW7Q10})(MZ)(H_{RW}) + (Q_T)(H_T)]/[(QRW7Q10)(MZ) + (QT)]$

Total Ammonia Criteria

 Chronic - applies state wide - unionzed criteria of 0.05 mg/l
 $[0.05*(1+10^{(pka-pH))}]/1.2$ pka=(0.0902+(2730/(273.1+T)) T = Temperature °C

 Acute - applies to the Ohio River (ORSANCO Criteria)
 $[0.411/(1+10^{(7.204-pH)})]+[58.4/(1+10^{(ph-7.204)})]$

Bioaccumulative or Persistent

For new facilities after September 8, 2004 mixing zones shall not be granted for bioaccumulative or persistent pollutants of concern.

Mixing zones for bioaccumulative or persistent pollutants of concerned assigned prior to September 8, 2004 shall expire no later than September 8, 2014, unless the permittee agrees to expiration of the mixing zone prior to that date.

Therefore, the application of the more stringent criteria of Human Health Fish & Water Consumption, Human Health Fish Only Consumption, and Aquatic Life Chronic shall apply as end-of-pipe effluent limitations.

Antidegradation

If a new facility or an existing facility that will have a pollutant load increase, the effluent limits are halved unless the receiving stream is impaired or the permittee has demonstrated a negative socioeconomic or cost benefit analysis.

Permit No.: KY0096776 AI No.: 2738 Fact Sheet Attachment A Page A - 4

STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) - REASONABLE POTENTIAL ANALYSIS - OUTFALL 001

Reasonable Potential Analysis

In establishing water quality based effluent conditions the Division of Water must determine if the pollutant concentrations in the discharge will cause, have the reasonable potential to cause, or contribute to an excursion of any water standard. The process by which the Division of Water makes this determination is known as a Reasonable Potential Analysis.

A Reasonable Potential Analysis is performed by first calculating the expected effluent limitations for those pollutants with water quality criteria. The calculated limits are then compared to the concentrations reported on the KPDES permit application and/or a summarization of the values reported on the Discharge Monitoring Report (DMRs) submitted during the term of the permit. This comparison is made by dividing the reported value by the calculated effluent limitation and converting to a percentage. The following criteria are used in determining how the pollutant will be addressed in the permit.

New Permits or New Pollutants on Permit Renewals

If the reported concentration is less than 70% of the calculated effluent limit then no monitoring or limitations will be required.

If the reported concentration is equal to or greater than 70% but less than 90% of the calculated effluent limit then monitoring will be required.

If the reported concentration is equal to or greater than 90% and the number of analysis reported on the KPDES permit application is less than 12 then monitoring will be required.

If the reported concentration is equal to or greater than 90% and the number of analysis reported on the KPDES permit application is equal or greater than 12 then an effluent limitation will be required.

Permit Renewals - Existing Pollutants

If the reported concentration is less than 70% of the calculated effluent limit then and the source of the reported concentration was the DMRs for that facility and there were more than 12 DMRs utilized to determine the reported concentrations then the pollutant will be removed from the permit.

If the reported concentration is equal to or greater than 70% but less than 90% of the calculated effluent limit then monitoring will be required.

If the reported concentration is equal to or greater than 90% then an effluent limitation will be required.

In all cases, the Division of Water still may exercise its Best Professional Judgment in the implementation of the results.

<u>Parameter</u>	<u>CAS</u> Number		scharge (mg/l)	Calculated Effluent		Reasonable		Data Source	No. of Samples	Effluent Re			cation
	Itamber	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>		<u>oumpico</u>	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>
Chlarida	40007000	7 400 000000	7 400 000000	000 000000	4 200 000000	1183.33	591.67	A !: +:	0	Manitanian	Manitanian	Chana'a	A4-
Chloride Total Residual Chlorine	16887006	7,100.000000 0.000000	7,100.000000 0.000000	600.000000 0.011000	1,200.000000 0.019000	% 0.00%	0.000/	Application No Data	2	Monitoring	Monitoring	Chronic	Acute
Total Residual Chlorine		0.000000	0.000000	0.011000	0.019000	0.00%	0.00%	NO Data	U	None	None	Chronic HH	Acute
Color		0.000000	0.000000	17,536.980607	NA	0.00%	0.00%	No Data	0	None	None	DWS	NA
Color		0.000000	0.000000	17,550.900007	INA	0.00 /0	0.0070	NO Data	U	None	None	HH	INA
Fluoride		11.850000	50.000000	467,652.816182	NA 🔺	0.00%	0.00%	DMR	9	Monitoring	Monitoring	DWS	NA
			00.00000	2,338,264.0809		5.5	0.00	2	·			HH	
Nitrate-Nitrite (as N)	14797558	0.000000	0.000000	08	NA	0.00%	0.00%	No Data	0	None	None	DWS	NA
Total Alpha		0.000000	0.000000	NA	15,000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Total Beta		0.000000	0.000000	NA	50.000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Total Radium		0.000000	0.000000	NA	5.000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
				58,456,602.022								HH	
Sulfate (as SO4)		0.000000	0.000000	711	NA	0.00%	0.00%	No Data	0	None	None	DWS	NA
()												HH	
Surfactants		0.000000	0.000000	116,91 <mark>3.204</mark> 045	NA	0.00%	0.00%	No Data	0	None	None	DWS	NA
												HH	
Total Recoverable Barium	7440393	0.000000	0.000000	233,826.408091	NA	0.00%	0.00%	No Data	0	None	None	DWS	NA
Total Recoverable Iron	7439896	1.000000	2.100000	1.000000	4.000000	100.00%	52.50%	DMR	9	Limit	Monitoring	Chronic	Acute
Total Recoverable Antimony	7440360	0.000000	0.000000	0.640000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Total Recoverable Arsenic	7440382	0.036000	0.050000	0.150000	0.340000	24.00%	14.71%	Application	2	None	None	Chronic	Acute
				No.								HH	
Total Recoverable Beryllium	7440417	0.000000	0.000000	935.305632	NA	0.00%	0.00%	No Data	0	None	None	DWS	NA
Total Recoverable Cadmium	7440439	0.000000	0.000000	0.000271	0.002133	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
												HH	
Total Recoverable Chromium	7440439	0.000000	0.000000	23,38 <mark>2.6</mark> 40809	NA	0.00%	0.00%	No Data	0	None	None	DWS	NA
Total Recoverable Copper	7440508	0.007500	0.010000	0. <mark>009</mark> 329	0.013999	80.40%	71.43%	Application	2	Monitoring	Monitoring	Chronic	Acute
Total Recoverable Lead	7439921	0.007500	0.010000	0.003182	0.081645	235.73%	12.25%	Application	2	Monitoring	None	Chronic	Acute
Total Recoverable Mercury	7439976	0.000000	0.000000	0.000051	0.001700	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
Total Recoverable Nickel	7440020	0.000000	0.000000	0.052163	0.469174	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Total Recoverable Selenium	7782492	0.000000	0.000000	0.005000	0.020000	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Total Recoverable Silver	7440224	0.000000	0.000000	NA	0.003784	0.00%	0.00%	No Data	0	None	None	NA	Acute
Total Recoverable Thallium	7440280	0.000000	0.000000	0.006300	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Total Recoverable Zinc	7440666	0.020000	0.030000	0.119816	0.119816	16.69%	25.04%	Application	2	None	None	Chronic	Acute
Free Cyanide	57125	0.000000	0.000000	0.005200	0.022000	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
2,3,7,8 Tetrachlorodibenzo P Dioxin	1746016	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Acrolein	107028	0.000000	0.000000	0.290000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Acrylonitrile	107131	0.000000	0.000000	0.000250	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Benzene	71432	0.000000	0.000000	0.051000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Bromoform	75252	0.000000	0.000000	0.140000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Carbon Tetrachloride	56235	0.000000	0.000000	0.001600	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Chlorobenzene	108907	0.000000	0.000000	21.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Chlorodibromomethane	124481	0.000000	0.000000	0.013000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Chloroform	67663	0.000000	0.000000	0.470000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Dichlorobromomethane	75274	0.000000	0.000000	0.017000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,2-Dichloroethane	107062	0.000000	0.000000	0.037000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,1-Dichloroethylene	75354	0.000000	0.000000	0.003200	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,2-Dichloropropane	78875	0.000000	0.000000	0.015000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA

Parameter_	<u>CAS</u>	Reported Dis	scharge (mg/l)	Calculated Effluent I	Limitations (mg/l)	Reasonable	e Potential	Data Source	No. of	Effluent Re	equirement	<u>Justifi</u>	cation
	<u>Number</u>	Average	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>		Samples	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>
1,3-Dichloropropene	542756	0.000000	0.000000	1.700000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Ethylbenzene	100414	0.000000	0.000000	29.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Methyl Bromide	74839	0.000000	0.000000	1.500000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Methylene Chloride	75092	0.000000	0.000000	0.590000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,1,2,2-Tetrachloroethane	79345	0.000000	0.000000	0.004000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Tetrachloroethylene	127184	0.000000	0.000000	0.003300	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Toluene	108883	0.000000	0.000000	200.000000	NA 👍	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,2-Trans-Dichloroethylene	156605	0.000000	0.000000	140.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
						4	•					HH	
1,1,1-Trichloroethane	71556	0.000000	0.000000	46,765.281618	NA	0.00%	0.00%	No Data	0	None	None	DWS	NA
1,1,2-Trichloroethane	79005	0.000000	0.000000	0.016000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Trichloroethylene	79016	0.000000	0.000000	0.030000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Vinyl Chloride	75014	0.000000	0.000000	0.530000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2-Chlorophenol	95578	0.000000	0.000000	0.150000	NA NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2,4-Dichlorophenol	120832	0.000000	0.000000	0.290000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2,4-Dimethylphenol	105679	0.000000	0.000000	0.850000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2,4-Dinitrophenol	51285	0.000000	0.000000	5.300000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Pentachlorophenol	87865	0.000000	0.000000	0.003000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Phenol	108952	0.000000	0.000000	1,700.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2,4,6-Trichlorophenol	88062	0.000000	0.000000	0.002400	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Acenaphthene	83329	0.000000	0.000000	0.990000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Anthracene	120127	0.000000	0.000000	40.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Benzidine	92875	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Benzo(a)anthracene	56553	0.000000	0.000000	0.000018	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Benzo(a)pyrene	50328	0.000000	0.000000	0.000018	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Benzo(k)fluoranthene	205992	0.000000	0.000000	0.0 <mark>00</mark> 018	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Bis(2-chloroisopropyl)ether	108601	0.000000	0.000000	65 <mark>.00</mark> 0000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Bis(2-ethylhexyl)phthalate	117817	0.000000	0.000000	0.002200	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Butylbenzyl phthalate	85687	0.000000	0.000000	1.900000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2-Chloronaphthalene	91587	0.000000	0.000000	1,600000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Chrysene	218019	0.000000	0.000000	0.000018	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Dibenzo(a,h)anthracene	53703	0.000000	0.000000	0.000018	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,2-Dichlorobenzene	95501	0.000000	0.000000	17.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,3-Dichlorobenzene	541731	0.000000	0.000000	0.960000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,4-Dichlorobenzene	106467	0.000000	0.000000	2.600000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
3,3-Dichlorobenzidine	91941	0.000000	0.000000	0.000028	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Diethyl phthalate	84662	0.000000	0.000000	44.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Dimethyl phthalate	131113	0.000000	0.000000	1,100.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Di-n-butyl phthalate	84742	0.000000	0.000000	4.500000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2,4-Dinitrotoluene	121142	0.000000	0.000000	0.003400	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,2-Diphenylhydrazine	122667	0.000000	0.000000	0.000200	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Fluoranthene	206440	0.000000	0.000000	0.140000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Fluorene	86737	0.000000	0.000000	5.300000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Hexachlorobenzene	118741	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Hexachlorobutadiene	87683	0.000000	0.000000	0.018000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Hexachlorocyclopentadiene	77474	0.000000	0.000000	17.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Hexachloroethane	67721	0.000000	0.000000	0.003300	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Ideno(1,2,3-cd)pyrene	193395	0.000000	0.000000	0.000018	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA

Doromotou	CAS	Reported Di	scharge (mg/l)	Calculated Effluent L	imitations (mg/l)	Reasonable	e Potential	Data Causes	No. of	Effluent Re	quirement	Justifi	cation
<u>Parameter</u>	Number	Average	Maximum	Average	Maximum	Average	Maximum	Data Source	Samples	Average	Maximum	Average	Maximum
Isophorone	78591	0.000000	0.000000	0.960000	NA NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Nitrobenzene	98953	0.000000	0.000000	0.690000	NA	0.00%	0.00%	No Data	Ö	None	None	HH Fish	NA
N-Nitrosodimethylamine	62759	0.000000	0.000000	0.003000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosodi-n-Propylamine	621647	0.000000	0.000000	0.000510	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosodiphenylamine	86306	0.000000	0.000000	0.006000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Pyrene	129000	0.000000	0.000000	4.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
1,2,4-Trichlorobenzene	120821	0.000000	0.000000	0.940000	NA 👍	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Aldrin	309002	0.000000	0.000000	0.000000	0.003000	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
alpha-BHC	319846	0.000000	0.000000	0.000005	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Beta-BHC	319857	0.000000	0.000000	0.000017	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
gamma-BHC (Lindane)	58899	0.000000	0.000000	0.000063	0.000950	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
gaa 2o (2aao)	00000	0.00000	0.00000	0.00000		#######	0.0070		A				, 10010
Chlordane	57749	0.001100	0.001200	0.000001	0.002400	###	50.00%	Application	2	Monitoring	None	HH Fish	Acute
4,4'-DDT	50293	0.000000	0.000000	0.000000	0.001100	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
4,4'-DDE	72559	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
4,4'-DDD	72548	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	Ö	None	None	HH Fish	NA
Dieldrin	60571	0.000000	0.000000	0.000000	0.000240	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
Alpha-Endosulfan	959988	0.000000	0.000000	0.000056	0.000220	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Beta-Endosulfan	33213659	0.000000	0.000000	0.000056	0.000220	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Endosulfan sulfate	1031078	0.000000	0.000000	0.089000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Endrin	72208	0.000000	0.000000	0.000036	0.000086	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Endrin aldehyde	7421934	0.000000	0.000000	0.000300	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Heptachlor	76448	0.000000	0.000000	0.000000	0.000520	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
Heptachlor epoxide	1024573	0.000000	0.000000	0.000000	0.000520	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
Polychlorinated Biphenyls (PCBs)	.02.0.0	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	Ö	None	None	HH Fish	NA
Toxaphene	8001352	0.000000	0.000000	0.000000	0.000730	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
1,2,4,5-Tetrachlorobenzene	95943	0.000000	0.000000	0.001100	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
2-methyl-4,6-dinitrophenol	534521	0.000000	0.000000	0.280000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
, ., .,									•			НН	
2,4-D	94757	0.000000	0.000000	56,164.016061	NA	0.00%	0.00%	No Data	0	None	None	DWS	NA
,												HH	
2,4,5-TP (Silvex)	93721	0.000000	0.000000	2,338.264081	NA	0.00%	0.00%	No Data	0	None	None	DWS	NA
2,4,5-trichlorophenol	95954	0.000000	0.000000	3.600000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
,				5,616,401,606.1	?							HH	
Asbestos	1332214	0.000000	0.000000	03620	NA	0.00%	0.00%	No Data	0	None	None	DWS	NA
Benzo(b)fluoranthene	205992	0.000000	0.000000	0.000018	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Bis(2-chloroethyl)ether	111444	0.000000	0.000000	0.000530	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Bis(chloromethyl)ether	542881	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Chloropyrifos	2921882	0.000000	0.000000	0.000041	0.000083	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Chromium (III)	16065831	0.000000	0.000000	0.086180	1.803049	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Chromium (VI)	18540299	0.000000	0.000000	0.011000	0.016000	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Demeton	8065483	0.000000	0.000000	0.000100	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Dinitrophenols	25550587	0.000000	0.000000	5.300000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Guthion	86500	0.000000	0.000000	0.000010	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Hexachlorocyclo-hexane-Technical	319868	0.000000	0.000000	0.000041	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Hydrogen Sulfide, Undissociated	7783064	0.000000	0.000000	0.002000	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Malathion	121755	0.000000	0.000000	0.000100	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Methoxychlor	72435	0.000000	0.000000	0.000030	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA

KPDES No.: KY0096776 AI No.: 2738 Fact Sheet Page 8

Parameter	CAS	Reported Discharge (mg/l)		Calculated Effluent	Calculated Effluent Limitations (mg/l)		Reasonable Potential		No. of	Effluent Requirement		<u>Justification</u>	
<u>i didilletei</u>	<u>Number</u>	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	Maximum	Data Source	<u>Samples</u>	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>
Mirex	2385855	0.000000	0.000000	0.00001	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Nitrosamines, Other		0.000000	0.000000	0.001240	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosodibutylamine	924163	0.000000	0.000000	0.000220	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosodiethylamine	55185	0.000000	0.000000	0.001240	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosopyrrolidine	930552	0.000000	0.000000	0.034000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Parathion	56382	0.000000	0.000000	0.000013	0.000065	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Pentachlorobenzene	608935	0.000000	0.000000	0.001500	NA 👍	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Phthalate esters		0.000000	0.000000	0.003000	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
				175,369,806.06		4						HH	
Total Dissolved Solids		0.000000	0.000000	8133	NA	0.00%	0.00%	No Data	0	None	None	DWS	NA
					20,000.00000								
Tritium		0.000000	0.000000	NA	0	0.00%	0.00%	No Data	0	None	None	NA	Acute
Total Strontium-90		0.000000	0.000000	NA	8.000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Uranium		0.000000	0.000000	NA	0.030000	0.00%	0.00%	No Data	0	None	None	NA	Acute
						21928.58	13574.						
Total Ammonia		737.000000	2,700.000000	3.360911	19.890204	%	52%	DMR	9	Limit	Limit	Chronic	Acute

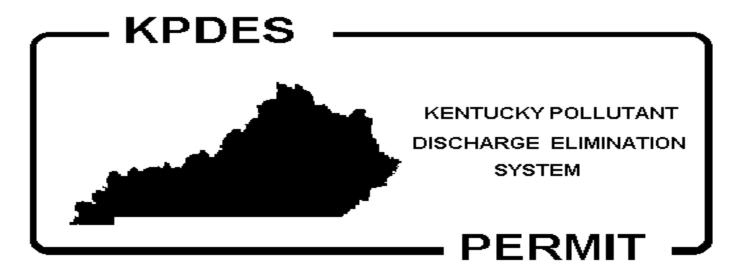
Hardness
Metal limitations are developed using the mixed hardness of the effluent and receiving waters

Toxicity

<u>Acute</u> 100.00

<u>Chronic</u> 100.00

	<u>Maximu</u>			<u>Percent</u>
Type of Test	<u>m</u>	<u>Units</u>	<u>Justification</u>	Effluent
Chronic	1.00	TUc	Chronic	100.00%



PERMIT NO.: KY0096776 **AI NO.:** 2738

AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to Authority in KRS 224,

National Maintenance & Repair of Kentucky, Inc. P.O. Box 534
South Point, Ohio 45680

is authorized to discharge from a facility located at

National Maintenance & Repair of Kentucky, Inc. 1175 Clarks Ferry Road Ledbetter, Livingston County, Kentucky 42058

to receiving waters named

Outfall 001 discharges to Ohio River at Latitude of 37° 03′ 19′′ and Longitude of 88° 31′ 03″

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, III, IV, and V hereof. The permit consists of this cover sheet, and Part I $\underline{2}$ pages, Part II $\underline{1}$ pages, Part III $\underline{1}$ page, and Part IV $\underline{3}$ pages.

This permit shall become effective on.

· Permit	and t	che autili	Offzacton	10 6	irscharge	SHALL	expire	al	midnight,
	1								
Date Signed					Sandra L Division			rec	tor

PART I Page I-1

Permit No.: KY0096776

AI No.: 2738

PART I A - EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 001 - Wash water from dry cargo barge cleaning

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS		DISCHARGE	LIMITATIONS		MONITORING REQUIREMENTS		
	(lbs/	day)	Other Units (Specify)			
	Monthly	Daily	Monthly	Daily	Measurement	Sample	
	Avg.	Max.	Avg.	Max.	Frequency	Type	
Flow (MGD)	Report	Report	N/A	N/A	1/Month	Instantaneous	
Total Suspended Solids (mg/l)	N/Ā	N/Ā	30	60	1/Month	Grab	
Oil & Grease (mg/l)	N/A	N/A	10	15	1/Month	Grab	
Total Recoverable Iron (mg/l)	N/A	N/A	Report	4.0	1/Month	Grab	
Ammonia (mg/l)	N/A	N/A	Report	19.89	1/Month	Grab	
Chlorides (mg/l)	N/A	N/A	Report	Report	1/Month	Grab	
Chlordane (µg/l)	N/A	N/A	Report	Report	1/Month	Grab	
Total Recoverable Copper (mg/l)	N/A	N/A	Report	Report	1/Month	Grab	
Total Recoverable Lead (mg/l)	N/A	N/A	Report	Report	1/Month	Grab	
Phosphorus (mg/l)	N/A	N/A	Report	Report	1/Month	Grab	
Fluoride (mg/l)	N/A	N/A	Report	Report	1/Month	Grab	
$BOD_5 (mg/1)$	N/A	N/A	Report	Report	1/Month	Grab	
Hardness (as mg/l CaCO ₃) $\frac{1}{2}$ /	N/A	N/A	Report	Report	1/Month	Grab	
pH (standard units)	N/A	N/A	6.0 (min)	9.0 (max)	1/Month	Grab	

The abbreviation N/A means Not Applicable.

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point prior to discharge to or mixing with the receiving waters or wastestreams from other outfalls.

1/ Measure the Hardness of the receiving stream.

PART I Page I-2

Permit No.: KY0096766 AI No.: 2738

PART I B - SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with all requirements on the effective date of this permit.



PART II Page II-1

Permit No.: KY0096766

AI No.: 2738

PART II - STANDARD CONDITIONS FOR KPDES PERMIT

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

The permittee is also advised that all KPDES permit conditions in KPDES Regulation 401 KAR 5:065, Section 1 will apply to all discharges authorized by this permit.

PART III Page III-1

Permit No.: KY0096766

AI No.: 2738

PART III - OTHER REQUIREMENTS

A. Reporting of Monitoring Results

Monitoring results obtained during each monitoring period must be reported on a preprinted Discharge Monitoring Report (DMR) Form that will be mailed to you. The completed DMR for each monitoring period must be sent to the Division of Water at the address listed below (with a copy to the appropriate Regional Office) postmarked no later than the 28th day of the month following the monitoring period for which monitoring results were obtained.

Division of Water
Paducah Regional Office
130 Eagle Nest Drive
Paducah, Kentucky 42003
ATTN: Supervisor

Division of Water Surface Water Permits Branch Permit Support Section 200 Fair Oaks Lane Frankfort, Kentucky 40601

B. Reopener Clause

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under 401 KAR 5:050 through 5:086, if the effluent standard or limitation so issued or approved:

- 1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- 2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

C. Outfall Signage

The permittee shall post a permanent marker at all discharge locations and/or monitoring points. The marker shall be at least 2 feet by 2 feet in size and a minimum of 3 feet above ground level with the Permittee Name and KPDES permit and outfall numbers in 2 inch letters. For internal monitoring points the marker shall be of sufficient size to include the outfall number in 2 inch letters and shall be posted as near as possible to the actual sampling location.

PART IV Page IV-1

Permit No.: KY0096766

AI No.: 2738

PART V - BEST MANAGEMENT PRACTICES

SECTION A. GENERAL CONDITIONS

1. Applicability

These conditions apply to all permittees who use, manufacture, store, handle, or discharge any pollutant listed as: (1) toxic under Section 307(a)(1) of the Clean Water Act; (2) oil, as defined in Section 311(a)(1) of the Act; (3) any pollutant listed as hazardous under Section 311 of the Act; or (4) is defined as a pollutant pursuant to KRS 224.01-010(35) and who have ancillary manufacturing operations which could result in (1) the release of a hazardous substance, pollutant, or contaminant, or (2) an environmental emergency, as defined in KRS 224.01-400, as amended, or any regulation promulgated pursuant thereto (hereinafter, the "BMP pollutants"). These operations include material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations, and sludge and waste disposal areas.

2. BMP Plan

The permittee shall develop and implement a Best Management Practices (BMP) plan consistent with 401 KAR 5:065, Section 2(10) pursuant to KRS 224.70-110, which prevents or minimizes the potential for the release of "BMP pollutants" from ancillary activities through plant site runoff; spillage or leaks, sludge or waste disposal; or drainage from raw material storage. A Best Management Practices (BMP) plan will be prepared by the permittee unless the permittee can demonstrate through the submission of a BMP outline that the elements and intent of the BMP have been fulfilled through the use of existing plans such as the Spill Prevention Control and Countermeasure (SPCC) plans, contingency plans, and other applicable documents.

3. Implementation

If this is the first time for the BMP requirement, then the plan shall be developed and submitted to the Division of Water within 90 days of the effective date of the permit. Implementation shall be within 180 days of that submission. For permit renewals the plan in effect at the time of permit reissuance shall remain in effect. Modifications to the plan as a result of ineffectiveness or plan changes to the facility shall be submitted to the Division of Water and implemented as soon as possible.

4. General Requirements

The BMP plan shall:

- a. Be documented in narrative form, and shall include any necessary plot plans, drawings, or maps.
- b. Establish specific objectives for the control of toxic and hazardous pollutants.
 - (1) Each facility component or system shall be examined for its potential for causing a release of "BMP pollutants" due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.

PART IV Page IV-2

Permit No.: KY0096766

AI No.: 2738

(2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances which could result in a release of "BMP pollutants," the plan should include a prediction of the direction, rate of flow, and total quantity of the pollutants which could be released from the facility as result of each condition or circumstance.

- c. Establish specific Best Management Practices to meet the objectives identified under paragraph b of this section, addressing each component or system capable of causing a release of "BMP pollutants."
- d. Include any special conditions established in part b of this section.
- e. Be reviewed by plant engineering staff and the plant manager.

5. Specific Requirements

The plan shall be consistent with the general guidance contained in the publication entitled "NPDES Best Management Practices Guidance Document," and shall include the following baseline BMPs as a minimum.

- a. BMP Committee
- b. Reporting of BMP Incidents
- c. Risk Identification and Assessment
- d. Employee Training
- e. Inspections and Records
- f. Preventive Maintenance
- q. Good Housekeeping
- h. Materials Compatibility
- i. Security
- j. Materials Inventory

6. SPCC Plans

The BMP plan may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under Section 311 of the Act and 40 CFR Part 151, and may incorporate any part of such plans into the BMP plan by reference.

7. Hazardous Waste Management

The permittee shall assure the proper management of solid and hazardous waste in accordance with the regulations promulgated under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1978 (RCRA) (40 U.S.C. 6901 et seq.) Management practices required under RCRA regulations shall be referenced in the BMP plan.

8. Documentation

The permittee shall maintain a description of the BMP plan at the facility and shall make the plan available upon request to NREPC personnel. Initial copies and modifications thereof shall be sent to the following addresses when required by Section 3:

Division of Water
Paducah Regional Office
130 Eagle Nest Drive
Paducah, Kentucky 42003
ATTN: Supervisor

Division of Water Surface Water Permits Branch Operational Permits Section 200 Fair Oaks Lane Frankfort, Kentucky 40601

PART IV Page IV-3

Permit No.: KY0096766

AI No.: 2738

9. BMP Plan Modification

The permittee shall amend the BMP plan whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in the release of "BMP pollutants."

10. Modification for Ineffectiveness

If the BMP plan proves to be ineffective in achieving the general objective of preventing the release of "BMP pollutants," then the specific objectives and requirements under paragraphs b and c of Section 4, the permit, and/or the BMP plan shall be subject to modification to incorporate revised BMP requirements. If at any time following the issuance of this permit the BMP plan is found to be inadequate pursuant to a state or federal site inspection or plan review, the plan shall be modified to incorporate such changes necessary to resolve the concerns.

SECTION B. SPECIFIC CONDITIONS

N/A